

REMARKS

By the above actions, claims 1 and 12 have been amended. Additionally, a set of replacement drawings containing corrected Figs. 1, 11 and 12 are appended to this Amendment. In view of these actions and the following remarks, reconsideration of this application is now requested.

The Examiner's indication of allowable subject matter with regard to claims 2, 4, 7, 8, 10, and 11 has been noted with appreciation. However, since the independent claim from which these claims depend is believed to be patentable, for the reasons indicated below, no action is being taken at this time to place these claims in independent form.

With regard to the objection to the drawings with regard to the absence of reference characters 24, 0, 264 and 4', and the need for a "prior art" label for Fig. 1, the required prior art designation has been added to Fig. 1 as required and reference numbers 4 and 4' have been deleted from Figs. 11 and 12. No numeral "264" could be found in the drawings and it is therefore believed to have been a typographical error with the unmentioned numeral 4 having been intended. As for the reference character "0," this numeral was present in paragraph [0031] as originally filed so no correction to the drawings was needed; however, an error in that paragraph was noted and corrected above. Thus, the objection to the drawings should now be withdrawn.

Claims 1, 3, 5, & 9 have been rejected under 35 U.S.C. § 102 as being anticipated by the disclosure of the patent to White et al. while claim 12 has been rejected based on this reference in combination with the patent to Scholtz et al. under 35 U.S.C. § 103. To the extent that these rejections relate to the amended claims, they should be withdrawn for the following reasons.

Firstly, it is pointed out that claims 1 & 2 have been amended to indicate that the invention involves a "high pressure rare gas short arc discharge lamp" and that "the first electrode is connected to a high voltage pulse generator for receiving a high voltage therefrom," the first electrode being the electrode relative to which the at least one conductive component has an electrical potential that is identical. Because the at least one conductive component has an electrical potential that is identical to the electrode which receives a high voltage from a high voltage pulse generator, the tip of the conductive component receives an electrical field that will cause the gas in the vicinity of this tip to reach the breakdown voltage and become ionized. Thus, a local glow discharge forms resulting in electromagnetic waves

which induce electron emission from the one of the electrodes by a photoelectric effect. The breakdown voltage between the electrodes is thus reduced and the main discharge starts more easily and the xenon begins to emit. Furthermore, this result enables the use of an external trigger wire for reducing the breakdown voltage to be avoided

The White et al. patent relates to a different type of lamp for the present invention (metal vapor discharge lamp as opposed to a the White et al. patent short arc discharge lamp). While the Examiner has indicated his view that the White et al. patent relates to a short arc discharge lamp, the basis for this conclusion is not discernable from a review of the White et al. patent, and in any event, their lamps are not high pressure rare gas discharge lamps as now claimed, being filled with metal vapor and having a rare gas pressure of only 25 Torr (3.3 kPa) which is much lower than the MPa range used in rare gas lamps. Due to the low rare gas pressure, a low starting voltage (see Table 1 in column 4 of the White et al. patent) is sufficient for starting the lamps of the White et al. patent and no high voltage pulse (as used in the present invention as now claimed) is required, and there is no conductive component having the same electrical potential as the electrode on a high voltage side as now claimed.

As for the Scholz et al. patent, this discharge lamp also is of a different type from the present invention not being a *high pressure rare gas* discharge lamp and being designed for "low wattage applications." Thus, not only is the White et al. patent not anticipative of the present invention, but no combination of the White et al. patent with the Scholz et al. patent can render the present invention obvious. Accordingly, the rejections based on the White et al. patent alone and in combination with Scholz et al. patent should be withdrawn.

Claims 1 & 6 were rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Geven et al. and Mizuno et al. patents. This rejection is also deemed inappropriate with respect to the claims as now presented.

Here again, neither of these patents is a high pressure *rare gas* discharge lamp, Geven et al. being a "sodium discharge" lamp and the Mizuno et al. lamp being a "metal-vapor" discharge lamp. Even though the rare gas argon is present in the Geven et al. lamp, it is not an emissive material (the emissive material being sodium) as is the case in a *rare gas* discharge lamp and is only used to improve the starting characteristics of the lamp. Likewise, the xenon gas used by Mizuno et al. serves only as "a starting rare gas" with a metal being used as the discharge medium (col. 2, lines 44-47). Thus, no combination of these two references could lead to the present applicants' improvement in high pressure *rare gas* discharge lamps.

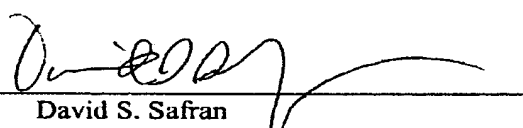
Accordingly, reconsideration and withdrawal of the rejection under § 103 based upon the Geven et al. and Mizuno et al. patents is in order and is now requested.

The prior art that has been cited, but not applied by the Examiner has been taken into consideration during formulation of this response. However, since this art was not considered by the Examiner to be of sufficient relevance to apply against any of the claims, no detailed comments thereon are believed to be warranted at this time.

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with applicant's representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,

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